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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,540	10/29/2002	Craig Linne	200-1022	7668

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EXAMINER

KRISHNAMURTHY, RAMESH

ART UNIT PAPER NUMBER

3753

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,540

Applicant(s)

LINNE ET AL.

Examiner

Ramesh Krishnamurthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 19 is/are pending in the application.
- 4a) Of the above claim(s) 15 - 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

This office action is responsive to amendment filed 04/26/2004.

Claims 1 – 19 are pending.

1. Applicant's election of Invention I (claims 1 – 14) in the reply filed on 04/26/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 15 – 19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 04/26/2004, as set forth above.

Claims 1 – 14 remain for further consideration.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 9 – 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Schoch (US 4,945,742).

Schoch discloses a fluid metering apparatus (Figs. 7 and 11, for example) comprising an intensifier (252) that includes a hollow elongate member (see Fig. 11) having a small orifice in one end (the end of (252) that is connected to (254)), the orifice having a width smaller than a width of the hollow elongate member, which receives hydraulic fluid (from (278)) and which selectively emits fluid

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through the orifice (at the junction of (252) and (254)) at a certain pressure; and a regulator (274) which is coupled to the intensifier and which receives and outputs the fluid which is emitted from the intensifier while regulating the pressure of the provided fluid.

The intensifier (252) clearly has a first wide portion (the portion traversed by the plunger system (266,268)) and a second narrow portion (where (254) communicates with (272)) and inherently is tapered since the cross sectional area decreases from that corresponding to (272) to the much narrower (254). A plunger (266,268) is movable within the first portion and pushes the fluid from said first portion to said portion. The fluid in (278) is disclosed to be a hydraulic fluid that certainly includes water.

The apparatus disclosed by Schoch necessarily performs the method recited in claims 9 - 11 during its usual and normal operation.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor

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and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 3, 13 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schoch (US 4,945,742).

Schoch discloses the intensifier (252) to clearly have a first wide portion (the portion traversed by the plunger system (266,268)) and a second narrow portion (where (254) communicates with (272)) and inherently is tapered since the cross sectional area decreases from that corresponding to (272) to the much narrower (254).

However, should it be determined that the second narrow portion in Schoch lacks a tapered end, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a taper therein since provision of a taper is well known to one skilled in the art and in the instant situation would allow for a smoother flow and lower pressure loss.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoch (US 4,945,742).

The patent to Schoch discloses the claimed invention with the exception of explicitly disclosing the orifice (i.e. the opening connecting (272) to (254)) to have a width no greater than about one-eighth of the width of the first portion. The specific choice of the ratio of the width of the orifice to the width of the to be

about one-eighth is taken here to be a design expedient over those features disclosed by Schoch in that it neither solves any stated problem nor provides any new and/or unexpected result.

9. Claims 4 – 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoch (US 4,945,742) as applied to claims 1 – 3, 9 – 11, 13 and 14 above, and further in view of Serafin et al. (US 6,328,542).

The patent to Schoch discloses the claimed invention with the exception of explicitly disclosing a position transducer for sensing the position of the plunger.

Serafin et al. discloses an intensifier assembly that comprises a position sensor (38) that senses the position of a piston i.e. plunger within the intensifier for the purpose of controlling the regulation of fluid inflow to the intensifier, thereby enhancing its efficiency of operation.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided in Schoch a position sensor that senses the position of the plunger within the intensifier for the purpose of controlling the regulation of fluid inflow to the intensifier, thereby enhancing its efficiency of operation, as recognized by Serafin et al..

It is noted that Schoch discloses (Figs. 7 and 11) a valve (258) for selectively allowing air to be communicated to the first portion and a second valve such the valve ((11a) in Serafin et al.) that controls the flow of fluid from (278). The fluid in (278) is disclosed to be a hydraulic fluid that certainly includes water.

It is noted that Schoch discloses a controller (Fig. 7) that is anticipated (Col. 10, lines 6 – 24) to be controllably coupled to the first valve (258). Serafin et al. discloses the second valve (11a) to be coupled to a controller as well.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The document WO00/40346 and US 6,715,506 (that is derived from WO00/40346) disclose an arrangement for controlled dispensing of liquids involving an air driven plunger.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Response to Arguments

12. Applicant's arguments filed 04/26/2004 have been fully considered but they are not persuasive. Applicant's argument that Schoch fails to disclose (1) an orifice, (2) a taper in the second portion and (3) water as the fluid being emitted. While Schoch may disclose the apparatus in the form a schematic as in Figure

11, there is nevertheless a scaled representation of the elements involved since the intensifier (252) is clearly shown to have a first wide portion (the portion traversed by the plunger system (266,268)) and a second narrow portion (where (254) communicates with (272)). To one of ordinary skill in the art, such a representation clearly implies that element (254) is of a much smaller diameter than that of the portion (272) and an orifice is merely an opening and thus the opening is therefore of a smaller size than that of (272). As for the fluid being water, it has been noted above that the fluid in (278) is the emitted fluid and is disclosed to be a hydraulic fluid that certainly includes water. Applicant's argument that use of water in a mechanical press would result in corrosion of certain parts is found to be unpersuasive in that the disclosure of the use of a hydraulic fluid does not exclude water and one of ordinary skill in the art would choose appropriate material for the fluid conveying parts to avoid well-known issues such as corrosion.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramesh Krishnamurthy whose telephone number is (703) 305 - 5295. The examiner can normally be reached on Monday - Friday from 8:30 AM to 5:00 PM.

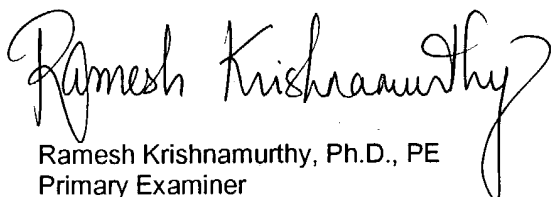
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Scherbel, can be reached on (703) 308 - 1272. The fax phone number for the organization where this application or proceeding is assigned is (703) 872 - 9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 - 0861.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, reading "Ramesh Krishnamurthy". The signature is fluid and cursive, with the first letter of each word being capitalized and prominent.

Ramesh Krishnamurthy, Ph.D., PE
Primary Examiner
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